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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,739	05/10/2004	David A. Giardino	CP-5144US2	9744

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EXAMINER	
CHUKWURAH, NATHANIEL C	

ART UNIT	PAPER NUMBER
3721	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/772,739	GIARDINO, DAVID A.	
	Examiner	Art Unit	
	Nathaniel C. Chukwurah	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *56-64,67 and 70-73* is/are pending in the application.

4a) Of the above claim(s) *62-64 and 67* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *56-61 and 70-73* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/17/2006 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 56-59 and 70-73 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 56 recites the limitation "the tool" in lines 2 and 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 70 recites the limitation "the tool" in lines 3 and 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 56-61 and 70-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. (US 2,727,598) in view of Holmin (US 6,155,355).

With regard to claim 56, Mitchell et al. discloses a method of using a modular control apparatus (12) comprising the steps of:

Providing a modular control apparatus (12), aligning, attaching and adjusting the output the modular control apparatus (see fig. 1) to a tool (11), and applying the tool to a workpiece (18, 19) as shown in Figure 1 wherein the apparatus is configured to shut off air flow to a tool after a selected time that torque is being applied by the tool (col. 5, lines 48-51, 55-59, 65-67).

The reference of Mitchell et al. discloses all claimed subject matter but specific teaching of a modular apparatus having a valve in fluid communication with the tool, and adjusting the flow rate of the valve to control the output of the modular control apparatus.

However, Holmin teaches a modular control apparatus (14) having a valve (20) in fluid communication with the tool (col. 2, lines 53-54), and adjusting the flow rate of the valve to control the output the modular control apparatus to a tool, for example, " a partial flow condition, which means that pressure air is supplied to the motor through the small size opening (33). Now, the motor is powered with full air pressure". See (col. 3, line 67; col. 4, lines 1-2 and 23-24), and applying the tool to a workpiece (a screw joint col. 3, line 42).

In view of the teaching of Holmin, it would have been obvious to one skilled in the art at the time of the invention to modify the modular control apparatus of Mitchell et al. by forming a

valve in fluid communication with the tool, and adjusting the flow rate of the valve to control the output the modular control apparatus to a tool, in order to prevent torque overshoot.

With regard to claim 57, the modified reference of Mitchell et al. includes the modular control being attached and detached from the tool via screws (12a), and the modular control apparatus is capable of being aligned, attached, adjusted to a second tool and applied to the second tool to a workpiece.

With regard to claims 58 and 59, the modified reference of Mitchell et al. includes a step of providing fluid and/or air to the modular control apparatus through the fitting (21).

With regard to claim 60, the reference of Mitchell et al. includes a method of using a pneumatic modular control apparatus comprising the steps of: attaching a pneumatic modular control apparatus (12) to a pneumatic tool (11) (see fig. 1) wherein the apparatus is configured to shut off air flow to a motor of tool in response to a selected time that torque is being applied by the tool (col. 5, lines 48-51, 55-59, 65-67); connecting a compressed-air supply channel (23) to an input port (23), channeling a compressed-air discharge from a discharge port to the tool's motor inlet, adjusting the control apparatus and applying the tool to the workpiece (18, 19) as shown in Figure 1.

The reference of Mitchell et al. discloses all claimed subject matter but specific teaching of a modular apparatus having a valve in fluid communication with the tool, and adjusting the flow rate of the valve to control the output of the modular control apparatus.

However, Holmin teaches a modular control apparatus (14) having a valve (20) in fluid communication with the tool (col. 2, lines 53-54), and adjusting the flow rate of the valve to control the output the modular control apparatus to a tool, for example, " a partial flow condition,

which means that pressure air is supplied to the motor through the small size opening (33). Now, the motor is powered with full air pressure". See (col. 3, line 67; col. 4, lines 1-2 and 23-24), and applying the tool to a workpiece (a screw joint col. 3, line 42).

In view of the teaching of Holmin, it would have been obvious to one skilled in the art at the time of the invention to provide the modular control apparatus of Mitchell et al. with a valve in fluid communication with the tool, and adjusting the flow rate of the valve to control the output the modular control apparatus to a tool, in order to prevent torque overshoot.

With regard to claim 61, the modified reference of Mitchell et al. includes attaching a workpiece (18, 19) adapter (16 fig. 1) to at least drive shaft (14) of the motor of the tool.

With regard to claim 70, Mitchell et al. discloses a method of using a modular control apparatus (12) comprising the steps of:

Providing a modular control apparatus (12) having an alignment mechanism formed by the screws (12a) for aligning the modular control apparatus with a tool (11), wherein the apparatus is configured to shut off air flow to a tool after a selected time that torque is being applied by the tool (col. 5, lines 48-51, 55-59, 65-67) by a valve (29) in fluid communication with the tool (11), attaching and applying the tool to a workpiece (18, 19) as shown in Figure 1.

The reference of Mitchell et al. discloses all claimed subject matter but specific teaching of a modular apparatus adjusting the flow rate of the valve to control the output of the modular control apparatus. However, the reference of Holmin teaches a method of adjusting the flow rate of the valve to control the output the modular control apparatus to a tool, for example, " a partial flow condition, which means that pressure air is supplied to the motor through the small size

opening (33). Now, the motor is powered with full air pressure". See (col. 3, line 67; col. 4, lines 1-2 and 23-24) for setting the workpiece to desired degree of tightness.

In view of the teaching of the Holmin, it would have been obvious to one skilled in the art at time of the invention to provides the tool of Mitchell et al. with a method of adjusting the flow rate of the valve to control the output the modular control apparatus in order to set the workpiece to desired degree of tightness.

With regard to claim 71, the modified reference of Mitchell et al. includes an adapter (16) and attaching the adapter (16) to the tool (11).

With regard to claim 72, the modified reference of Mitchell et al. includes a method of aligning, attaching and adjusting the output the modular control apparatus (see fig. 1) to a tool (11), and applying the tool to a workpiece (18, 19) as shown in Figure 1.

With regard to claim 73, the modified reference of Mitchell et al. includes a method of providing a fluidic modular control apparatus (12).

Claims 56-61 and 70-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmin (US 6,155,355) in view of Whitehouse (US 4,434,858).

With regard to claim 56, Holmin discloses a method of using a modular control apparatus (14) comprising the steps of:

Providing a modular control apparatus (14) having a valve (20) in fluid communication with the tool (Fig. 1), aligning, attaching (see Figs. 1 and 2a) and adjusting the flow rate of the valve to control the output the modular control apparatus to a tool, for example, " a partial floe condition, which means that pressure air is supplied to the motor through the small size opening

(33). Now, the motor is powered with full air pressure". See (col. 3, line 67; col. 4, lines 1-2 and 23-24), and applying the tool to a workpiece (a screw joint col. 3, line 42).

Holmin discloses all claimed subject matter but lacks specific teaching of shutting off air flow to a tool after a selected time that torque is being applied by the tool.

However, Whitehouse teaches torque tool including shutting off air flow to a tool after a selected time that torque is being applied by the tool, for example, "power tool which is capable of responding during its application with minimal time delay in tool shut-off to provide superior uniformity and reliability of operation in precisely setting a workpiece to a degree of tightness" (col. 1, lines 56-60).

In view of the teaching of Whitehouse, it would have been obvious to one skilled in the art at the time of the invention to modify the control apparatus of the tool of Holmin by making the control apparatus capable of shutting off air flow to a tool after a selected time that torque is being applied by the tool for the benefit as discussed above in Whitehouse.

With regard to claim 57, the modular control of Holimn is attached and detached as shown in Figure 1 and 2a.

Holmin does not expressly state that the modular control apparatus can be aligned, attached, adjusted to a second tool and applied to the second tool to a workpiece, the modular control apparatus of Holmin is capable being adjusted to a second tool and applied to a second tool as shown in Figure 1 and 2a.

With regard to claims 58 and 59, the method of Holmin includes a step of providing fluid and/or air to the modular control apparatus (Fig. 2a).

With regard to claim 60, Holmin discloses a method of using a pneumatic modular control apparatus comprising the steps of: attaching a pneumatic modular control apparatus (14) to a pneumatic tool (Fig. 1), and having a valve (20) in fluid communication with the tool (Fig. 1), connecting a compressed-air supply channel (15) to an input port (22), channeling a compressed-air discharge from a discharge port to the tool's motor inlet, adjusting the control apparatus and applying the tool to the workpiece as described above, and adjusting the flow rate of the valve to control the output the modular control apparatus to a tool, for example, " a partial flow condition, which means that pressure air is supplied to the motor through the small size opening (33). Now, the motor is powered with full air pressure". See (col. 3, line 67; col. 4, lines 1-2 and 23-24), and applying the tool to a workpiece (a screw joint col. 3, line 42).

Holmin discloses all claimed subject matter but lacks specific teaching of shutting off air flow to a tool after a selected time that torque is being applied by the tool.

However, Whitehouse teaches torque tool including shutting off air flow to a tool after a selected time that torque is being applied by the tool, for example, "power tool which is capable of responding during its application with minimal time delay in tool shut-off to provide superior uniformity and reliability of operation in precisely setting a workpiece to a degree of tightness" (col. 1, lines 56-60).

In view of the teaching of Whitehouse, it would have been obvious to one skilled in the art at the time of the invention to modify the control apparatus of the tool of Holmin by making the control apparatus capable of shutting off air flow to a tool after a selected time that torque is being applied by the tool for the benefit as discussed above in Whitehouse.

With regard to claim 61, the method of Holmin includes attaching a workpiece adapter (nut socket col. 3, line 43) to at least drive shaft (18) of the motor of the tool.

With regard to claim 70, Holmin discloses a method of using a modular control apparatus (14) comprising the steps of:

Providing a modular control apparatus (14) having a valve (20) in fluid communication with the tool (Fig. 1), aligning, attaching (see Figs. 1 and 2a) and adjusting the flow rate of the valve to control the output the modular control apparatus to a tool, for example, " a partial floe condition, which means that pressure air is supplied to the motor through the small size opening (33). Now, the motor is powered with full air pressure". See (col. 3, line 67; col. 4, lines 1-2 and 23-24), and applying the tool to a workpiece (a screw joint col. 3, line 42).

Holmin discloses all claimed subject matter but lacks specific teaching of shutting off air flow to a tool after a selected time that torque is being applied by the tool.

However, Whitehouse teaches torque tool including shutting off air flow to a tool after a selected time that torque is being applied by the tool, for example, "power tool which is capable of responding during its application with minimal time delay in tool shut-off to provide superior uniformity and reliability of operation in precisely setting a workpiece to a degree of tightness" (col. 1, lines 56-60).

In view of the teaching of Whitehouse, it would have been obvious to one skilled in the art at the time of the invention to modify the control apparatus of the tool of Holmin by making the control apparatus capable of shutting off air flow to a tool after a selected time that torque is being applied by the tool for the benefit as discussed above in Whitehouse.

With regard to claim 71, the method of Holmin includes attaching a workpiece adapter (nut socket col. 3, line 43) to at least drive shaft (18) of the motor of the tool.

With regard to claim 72, the modular control of Holimn is attached and detached as shown in Figure 1 and 2a.

Holmin does not expressly state that the modular control apparatus is aligned, attached, adjusted to a second tool and applied to the second tool to a workpiece, the modular control apparatus of Holmin is capable being adjusted to a second tool and applied to a second tool as shown in Figure 1 and 2a.

With regard to claim 73, the method of Holmin includes a step of providing fluid to the modular control apparatus (Fig. 2a).

Response to Arguments

Applicant's arguments with respect to claims 56-61 and 70-73 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Refer to attachment for notice of references cited and recommended for consideration based on their disclosure of limitations of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathaniel C. Chukwurah whose telephone number is (571) 272-4457. The examiner can normally be reached on M-F 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NC

February 3, 2006.

JOHN SIPOS
PRIMARY EXAMINER